



UNITED STATES PATENT AND TRADEMARK OFFICE

---

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/715,962  
Filing Date: November 18, 2003  
Appellant(s): BIRKENBACH ET AL.

---

Jason A. Worgull  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 28, 2009 appealing from the Office action mailed October 28, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. Additionally, the following new grounds of rejection are set forth:

**NEW GROUND(S) OF REJECTION**

Claim 2-3, 6, 9-10, 20, 22 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement (claims 20 and 28 were previously rejected under the written description requirement, claims 2-3, 6, 9-10, 26 and 28 are now additionally rejected under the same grounds).

Art Unit: 3739

Claim 2-3, 6, 9-10 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement (claim 27 was previously rejected under the enablement requirement, claims 2-3, 6, 9-10, 26 and 28 are now additionally rejected under the same grounds).

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,788,688

Bauer

8-1998

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**NEW GROUND(S) OF REJECTION**

Claims 2-3, 6, 9-10, 20, 22 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 20 and 28 recite "wherein the central control unit is configured to receive output signals and relay received input signals *without conversion* of the received input signals to command protocols of the least two medically applicable apparatuses". However, contradicting this limitation, applicant states that "one or more processors 21 can be provided in the central control unit 2, *to convert* the control signals coming from the screen 4 into formats corresponding to the respective control apparatus 3a-3d, which can be

Art Unit: 3739

forwarded to the corresponding control apparatus 3a-3d via the lines 5a-5d (see paragraph 0034 of applicant's specification). Thus, it is unclear how it is claimed that the control unit relays input signals to the medical apparatuses *without* conversion of these signals, when the specification clearly states that at least one processor receives inputted control signals, *converts* the control signals into formats corresponding to the respective at least two control apparatuses, and transfers the *converted* control signals to the at least two control apparatuses to control the at least two medically applicable instruments. Furthermore, with regard to independent claims 20 and 27, the phrasings "*without conversion* of the received input signals" and "*without controlling* the medically applicable apparatuses", respectively, are considered to be new matter as the limitations are not supported in the specification. Particularly, paragraphs 0011-0012, disclose a control system wherein different control apparatuses of different medical instruments can be controlled without rewriting/modifying *the software or hardware* used in the control apparatus for each individual medical instrument. Rewriting the software or hardware of a control apparatus is not the equivalent of converting an input signal into a command protocol. Thus, there is no written disclosure describing the function of the central control system with regard to command protocols other than as described in paragraph 0034, wherein the input signals are said to be converted into formats corresponding to the respective control apparatuses. Nor is any disclosure provided regarding forwarding input signals to the control apparatuses *without* controlling the medical apparatuses. Again, rewriting software or hardware is not the equivalent to

Art Unit: 3739

converting or relaying signals to command protocols. Claims 2-3, 6, 9-10, 22, 26 and 28 are rejected as being necessarily dependant upon claims 20 and 27.

Claims 2-3, 6, 9-10 and 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 27 recites “wherein the central control unit is configured to receive input signals from the at least one input device and forward the received input signals to the at least two control apparatuses *without* controlling the medically applicable apparatuses.” It is unclear how the system would work if the central control unit does not ultimately control the medical apparatus. As disclosed by the applicant, the central control system receives inputted control signals, which are then transferred to the at least two control apparatuses to control the at least two medically applicable instruments (see paragraph 0034 of applicant’s specification). Thus, the central control system does in fact passively control the medical instruments. If the central control system fails to transfer the inputted signal to the control apparatuses, then the medical instruments will never receive any inputted signals and thus can not be controlled via the inputted signals from the input device. If no inputted signals are received to control the medical instruments then the main objective of the system appears to be defeated. It is unclear what is meant by the terminology “without controlling the medically applicable apparatuses”. Claims 2-3, 6, 9-10, 26 and 28 are rejected as being necessarily dependant upon claim 27.

Art Unit: 3739

Previously presented ground(s) of rejection that are applicable to the appealed claims:

Claims 2-3, 6, 9-10, 20, 22 and 24-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 5,788,688 to Bauer et al.

**In regards to claims 20**, Bauer et al. disclose a system comprising: a central control unit 66 configured to couple to input and output connections of at least two medically applicable instruments 54, 64, 74, 60 via at least two control apparatuses 49, 44, 46, 48, 50 having different manufacturer-specific command protocols and associated command protocol software (see Col. 3, Lines 1-20); and a common output display device 70 coupled to the central control unit via a bus, wherein the bus provides electrical separation between the common output display device and the central control unit (see Fig. 3); at least one input device 70 coupled to the central control unit and configured to receive operator input (see Fig. 4); wherein the central control unit is configured to receive output signals from the at least two control apparatuses and adapt the received output signals for display on the common output display device, and the central control unit is configured to receive input signals from the at least one input device and relay the received input signals to the at least two control apparatuses (see Fig. 2 Col. 7, Lines 5-35); and wherein the central control unit is configured to receive output signals and relay received input signals without conversion of the received input signals to command protocols of the least two medically applicable apparatuses (see Fig. 1).

**In regards to claim 22**, Bauer et al. disclose a system, wherein the common output display device 70 is a single input and output display device comprised of a single touch screen display (see Figs. 2-3 and CO. 9, Lines 1-52).

**In regards to claim 24**, Bauer et al. disclose a system, a system including at least two medically applicable apparatuses 54, 64, 74, 60, the medically applicable apparatuses each being coupled to a different control apparatus 44, 46, 48, 50 (see Fig. 2), the control apparatuses having different manufacturer-specific input and output specifications, a central interface unit 66 coupled to input and output connections of said at least two control apparatuses (see Fig. 1 and Col 3, Lines 1-20), wherein the central interface unit includes at least one processor 78 that is configured to convert different manufacturer-specific display information and/or image formats from the control apparatuses into a predetermined, defined image format for display on a common output display device 68 (see Col. 7, Lines 50-67), wherein the central interface unit is configured to provide selective display of output data from the medically applicable apparatuses alone or in combination on the common output display device (see Col. 8, Lines 1-15).

**In regards to claim 25**, Bauer et al. disclose a system, wherein the central interface unit provides for selective display of data from different medically applicable apparatuses alone or in combination on the single output display device (see Fig. 2 and Col. 3, Lines 20-37 and Col. 4, Lines 28-33).

**In regards to claims 27-28**, Bauer et al. disclose a system comprising a central control unit 66 configured to couple to input and output connections of at least two

Art Unit: 3739

medically applicable instruments 54, 64, 74, 60 via at least two control apparatuses having 44, 46, 48, 50 different manufacturer-specific command protocols and associated command protocol software (see Fig. 1 and Col 3, Lines 1-20); a common output display device 68 coupled to the central control unit via a bus, wherein the bus provides electrical separation between the common output display device and the central control unit; and at least one input device 70 coupled to the central control unit and configured to receive operator input; wherein the central control unit is configured to receive input signals from the at least one input device and forward the received input signals to the at least two control apparatuses without controlling the medically applicable apparatuses (see Fig. 2 and Col. 3, Lines 20-37 and Col. 4, Lines 28-33).

**In regards to claim 26**, Bauer et al. disclose a system, wherein the input device 70, the common output device 54, and the at least two medically applicable instruments are positioned in an operating theater 32, and the central control unit 66 and the at least two control apparatuses are positioned outside the operating theater (see Fig. 1 and Col. 6, Lines 30-35).

**In regards to claim 2**, Bauer et al. disclose a system, wherein the central control unit includes at least one processor 78, which converts different display information and/or image formats into a predetermined, defined image format (see Figs. 3 and Col. 7, line 50 – Col. 8, Line 15).

**In regards to claim 3**, Bauer et al. disclose a system, wherein the at least two control apparatuses coupled to the at least two medical apparatus are provided in a rack 42 (see Fig. 1 and Col. 6, Lines 50-53).



**In regards to claim 6**, Bauer et al. disclose a system, wherein the input device 70 comprises a touch pad (see Fig. 4).

**In regards to claim 9**, Bauer et al. disclose a system, further comprising a storage device 80, 82 (see Fig. 3). The word “for” in the claim may be properly interpreted as “capable of,” and “capable of” does not require that reference actually teach the intended use of the element, but merely that the reference does not make it so it is incapable of performing the intended use.

**In regards to claim 10**, Bauer et al. disclose a system, wherein at least one device 68 forming the system being mounted to a ceiling of an associated operating room (see Fig. 1 and Col. 4, Lines 28-33).

#### **(10) Response to Argument**

With regard to the rejections made under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, the applicant states that the Examiner has failed to view the specification as a whole, by solely relying upon pg. 10, lines 14-21 (paragraph 0034) which is merely one embodiment of the invention. Examiner disagrees. The applicant refers to pg. 4, lines 4-26 (paragraphs 0011-0012 and pg. 8, Lines 7-17 (paragraph 0022) as providing support for independent claim 20 and dependant claim 28. The cited passages emphasize the disclosure a control system wherein different control apparatuses of different medical instruments can be controlled without rewriting/modifying the software or hardware used in the control apparatus for each individual medical instrument. However, there is no support in the cited passages for relaying input signals *without conversion* of the received input signals

Art Unit: 3739

to command protocols of the at least two medically applicable apparatuses. Rewriting the software or hardware of a control apparatus is *not* the equivalent of converting an input signal into a command protocol. The word “conversion”, is not used in the entire specification, let alone the cited passages. The Examiner makes reference to the Applicant’s abstract which explicitly states that, “At least one processor receives inputted control signals, *converts* the control signals into formats corresponding to the respective at least two control apparatuses, and transfers the *converted* control signals to the at least two control apparatuses to control the at least two medically applicable instruments.” Further detail of the conversion of these input signals is provided in paragraph 0014. However, the specification completely lacks any disclosure or discussion as to wherein the input signals are relayed without conversion into command protocols, as recited in independent claim 20 and dependant claim 28. Thus, for the reasons stated above, the claims stand rejected as failing to comply with the written description requirement.

The applicant refers to the identical passages within the specification for support of claim 27 as failing to comply with the enablement requirement. Again the passages focus on language stating that the different medical instruments can be controlled without rewriting/modifying the software or hardware used in the control apparatus for each individual medical instrument. Additionally, that the central control unit can transmit input signals to the medical instruments or the control apparatus coupled to the respective medical instruments. There is no disclosure wherein the inputted signals are

Art Unit: 3739

relayed to the control apparatuses *without control* of the medical instruments. In fact, in the arguments filed within the Appeal Brief, pg. 11, Lines 13-18, the applicant states:

“the application as a whole, including the exemplary disclosures in the present application at page 4, lines 4-26, and at page 8, lines 7-17, (see passages reproduced above), describes embodiments in which the central control unit "transfers" or "relays" signals from the input device to the control apparatuses. The control apparatuses **then control** the medically applicable apparatuses based on the signals relayed or transferred by the central control unit. “

The Applicant's own arguments appear to contradict the current claims limitations of claims 27, which states that the input signals are forwarded to the control apparatuses **without controlling** the medical instruments. Thus, claim 27 stands rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, as it is unclear how the system would work if the central control unit does not ultimately control the medical apparatus. As disclosed by the applicant, the central control system receives inputted control signals, which are then transferred to the at least two control apparatuses to control the at least two medically applicable instruments (see paragraph 0034 of applicant's specification). Thus, the central control system does in fact passively control the medical instruments. If the central control system fails to transfer the inputted signal to the control apparatuses, then the medical instruments will never receive any inputted signals and thus can not be controlled via the inputted signals from the input device. If no inputted signals are received to control the medical instruments then the main objective of the system appears to be defeated.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies

Art Unit: 3739

(i.e., “without having to determine/download any special protocol for the manufacturer of a given control apparatus” and “without rewriting/modifying software or hardware of the control apparatuses”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant states that Bauer fails to make any mention of working with multiple control apparatus having different manufacture-specific command protocols and associated command protocol software. Examiner disagrees. Bauer discloses a central control unit 66 configured to couple to input and output connections of at least two medically applicable instruments 54, 64, 74, 60 via at least two control apparatuses having 44, 46, 48, 50 different manufacturer-specific command protocols and associated command protocol software (see Fig. 1 and Col 3, Lines 1-20). As seen in Figure 2, Bauer shows the use of a variety of different medical instruments, such as a laser 62, an endoscope 64 etc. These instruments inherently have different manufacturer-specific command protocols and software as they are different working instruments. An endoscope **cannot** operate under command protocols used to operate and control a laser or insufflation device. Likewise, a laser **cannot** operate with software intended to be used for operation and control of an endoscope. Further evidence is provided in Figs 6-9, which diagram each individual instrument as having its own microprocessor (see Col. 10, Lines 33-40). Such operations and control apparatuses are considered inherently and well known in the art. Thus, Bauer clearly

Art Unit: 3739

discloses working with multiple control apparatuses 44, 46, 48, 50 having different manufacture-specific protocol and associated command protocol software.

Applicant states that Bauer fails to disclose single central input and output display device comprised of a single touch screen display. Examiner disagrees. As seen in Figure 5, Bauer clearly shows a sterile panel 70 that is used as a central input and output display for each individual medical instrument attached thereto. The sterile control panel 70 duplicates the essential elements of output power setting and configuration displays found on the control unit of each individual device 44, 46, 48, and 50, see FIG. 1, so that adjustments made from the operating table positions can be done conveniently, independently, rationally and safely (see Col. 9, Lines 9-15). As broadly as claimed, touch screen display 70 provides the user with central input of signals to the various instruments as well as providing indicator displays of the various instruments (see Figs. 1-2), and thus Bauer meets the current limitations of the claims.

Applicant states that the central interface unit of Bauer fails to include at least one processor configured to convert different display manufacture-specific display information into a predefined image format for display on a common output. Examiner disagrees. The main objective of the central input/output display 70 of Bauer is to display the essential elements of output power setting and configuration displays of the instruments connected thereto. Bauer disclose that many of the switches on the central input/output display are co-located with a small red indicator display that reflects whether the mode or power is on or off. All numerical indicators are seven segment 0.5 inch red high intensity displays. Alternatively, liquid crystal displays with backlighting

Art Unit: 3739

capability could be used. Bar graph displays are used to reflect percentage increase/decrease as in the light control areas as well as the insufflation preset and actual display. These indicators are ten segment, high density display units. Multiple displays indicate warnings and are composed of a series of high intensity, discrete red LED's (see Col. 9, Lines 35-51). The surgeon has direct control of the various surgical devices in the operating room through sterile control located at the surgeon's operating station, allowing the surgeon and assistant to make equipment adjustments without breaking sterile procedure. The sterile control panel provides duplicate control heads for each device integrated into the SCC system so that any command input possible through adjustments made on the device's equipment box control head can be made at the sterile control panel (see Col. 4, Lines 40-50). Thus, as broadly as claimed, Bauer meets the limitations of the current claims.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section **(9)** above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

/Matthew J Kasztejna/  
Art Unit 3739

11/5/09

**A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:**

/DONALD T HAJEC/

Director, Technology Center 3700

Conferees:

/Linda C Dvorak/

Supervisory Patent Examiner, Art Unit 3739

/Tom Hughes/

TQAS, TC 3700